



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,153	05/05/2004	Timothy D. Twerdahl	PA2754US	7408

22830 7590 06/22/2007  
CARR & FERRELL LLP  
2200 GENG ROAD  
PALO ALTO, CA 94303

EXAMINER
----------

SHAPIRO, LEONID

ART UNIT	PAPER NUMBER
----------	--------------

2629

MAIL DATE	DELIVERY MODE
-----------	---------------

06/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/840,153

Applicant(s)

TWERDAHL ET AL.

Examiner

Leonid Shapiro

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 11/13/06, 8-2-04

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2,4-10,12-18,20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bomers (US 2005/0097570 A1) in view Khoo (2003/0227745 A1).

As to claims 1,9,17 Bomers teaches a method of converting analog input in a hand-held computing device (paragraph 0001), the method comprising:

receiving the analog input from an analog input device in the hand-held computing device (fig. 3, item JOYSTICK, paragraph 0027, fig. 4, item 121);

converting the analog input to coordinates (paragraphs 0051-0054);

mapping the coordinates to a button for a hand-held computing device (fig. 3, item 104, fig. 4, item 122); and

generating an event indicating a state of the button for the hand-held computing device (fig. 4, item 124, paragraphs 0060-0065).

Bomers do not disclose the first and the second hand-held computing device.

Khoo teaches the first and the second hand-held computing device (fig. 2B, items 224-225, paragraph 0056).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Khoo teachings into Bomers system in order to obtain compound portable device (paragraph 0006 in the Khoo reference).

Art Unit: 2629

As to claims 2,10,18 Bomers teaches x, y coordinates (paragraph 0060).

As to claims 4,12,20 Bomers teaches tables of coordinates (paragraphs 0051-0054) and the button (in the reference OUTGOING ACTION) for the second hand-held computing device and wherein mapping the coordinates to the button is based on the table (paragraph 0060).

As to claims 5,13,21 Bomers teaches hand-held computing device comprises a legacy PALM operating system button implementation paragraphs 0019,0036).

As to claims 6-8,14-16,22-24 it generally considered to be within the ordinary skill in the art to adjust, vary, select or optimize the numerical parameters or values of any system absent of showing criticality of in a particular recited value. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to implement the subject matter of invention for 4,5 or buttons. Such a limitation would have been considered as obvious variation on the matter of number of buttons which fails patentably distinguish over the prior art of Bomer and Khoo. In re Rose, 105 USPQ 237 (CCPA 1955).

3. Claims 3,11,19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bomers and Khoo as applied to claim 1,9,17 above, and further in view of Lareau et al. (6,972,682 B2).

Bomers and Khoo do not disclose polar coordinates.

Lareau et al. teaches polar coordinates (col. 15, lines 17-31).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Lareau et al. teachings into Bomers and Khoo system in order to track assets (Abstract in the Lareau et al. reference).

### ***Telephone Inquire***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 571-272-7683. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/840,153

Page 5

Art Unit: 2629

06.08.07

A handwritten signature in black ink, appearing to read 'Richard Hjerpe', written in a cursive style.

RICHARD HJERPE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600